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CLAIMS

- A system for in vivo diagnosis, said system comprising
 a composition, said composition comprising at least a marking agent and a

 pharmaceutically acceptable carrier; and
 an autonomous in vivo device, said device comprising at least an

 illumination source and a light detector.
 - 3. The system according to claim 2 wherein the light detector is an image sensor.
 - 4. The system according to claim 1 or 3 wherein the image sensor is a CMOS...
- The system according to claims 1 or 2 comprising a transmitter.
 - 6. The system according to claims 1 or 2 comprising an internal power source.
 - The system according to claims 1 or 2 wherein the marking agent includes a
 photosensitizer.
 - 8. The system according to claims 1 or 2 wherein the marking agent includes a vital stain.
 - The system according to claims 1 or 2 wherein the marking agent includes a tumor marker.

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5	10. The system according to claims 1, 2 or 9 wherein the composition includes a
	moiety selected from the group consisting of: a dye, a radioactive moiety and a
	fluorescent moiety.

- 11. The system according to claim 1 or 2 comprising a polychromatic light source and a monochromatic light source.
- 10 12. The system according to claim 1 or 2 wherein the illumination source is configured to be activated in a flashing mode.
 - The system according to claims 1 or 2 comprising an image sensor and a light detector.
 - 14. The system according to claim 1 comprising a filter configured to cover at least some pixels of the image sensor.
 - 15. A method for in vivo diagnostics, the method comprising: administering a marking agent to a patient; illuminating white light within a body lumen; and obtaining images of endo-luminal tissue.
- 20 16. The method according to claim 15 wherein the marking agent includes a photosensitizer.
 - The method according to claim 15 wherein the marking agent includes a vital stain.
- 18. The method according to claim 15 wherein the marking agent includes a tumor 25 ^ marker.

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- 19. The method according to claim 15 comprising administering a composition to a patient, said composition including a moiety selected from the group consisting of: a dye, a radioactive moiety and a fluorescent moiety.
- 20. The method according to claim 15 comprising illuminating monochromatic light within a body lumen.
- 21. The method according to claim 15 comprising detecting fluorescent emission.
 - 22. The method according to claim 15 comprising illuminating in a flash mode.
 - 23. The method according to claim 15 comprising transmitting image information to an external receiving unit.